

Claim 46 is directed to a geophone housing. The '390 reference appears to be totally unrelated to geophones. The '390 reference teaches a piezoelectric acoustic transducer useful in projecting sound in water. Respectfully, the reference cannot reasonably be interpreted to teach anything related to geophones.

Since the cited reference is not related to geophones, it thus cannot teach each and every element of a claimed invention. Therefore, Applicant respectfully submits that claim 46 is not anticipated by the '390 reference. Applicant further submits that the claim is not obvious in view of any cited reference or combination of references, because there is no suggestion or motivation to combine the '390 reference to provide the claimed invention.

Claims 31-47 stand rejected 35 USC § 102(b) as being anticipated by Thompson ('674). Applicant respectfully traverses.

The '674 reference teaches an acoustic transducer for producing sound in a water environment substantially as taught in the '390 reference discussed above. Again, there appears to be no relevance to geophone technology. The '674 reference mentions the possibility of using the transducer as a receiver, but such a receiver cannot function as a geophone as taught in the reference. Each and every rejected claim is clearly directed and limited to geophones. Applicant respectfully submits that claims 31-47 are not anticipated or rendered obvious by the '674 reference.

35 USC § 103 REJECTIONS

Claims 1-17 and 20-30 stand rejected under 35 USC § 103(a) as being obvious over Hall Jr. ('464) or McNeel ('520, '692) when taken in view of Thompson ('674) or Pagliarini, Jr. ('390). Applicant respectfully traverses.

For a combination of references to render a claim obvious, the combination must teach every element of the claimed invention **and** there must be some suggestion or motivation to combine the references. Here the Examiner has combined references with no application to geophone technology with multiple references already addressed in the previous action and response.

Applicant first submits that the combination of references do not teach a double-ended geophone housing, and thus do not render the claims obvious. Moreover, there is no suggestion or motivation to combine either the '670 or '390 references with the references previously addressed, because the acoustic transducers taught in the '670 and '390 references are not analogous to geophone transducers. Geophone receivers are land-based acoustic receivers not piezoelectric ceramic transducers capable of producing sound in water. And as discussed above, the '670 and '390 references do not teach a transducer useful in geophone technology. Applicant respectfully submits that the Examiner has not established a *prima facie* case for obviousness using the cited art. Therefore, the claims are allowable over the suggested combinations.

CONCLUSION

For all of the foregoing reasons, applicant submits that the claims are allowable over the prior art of record. A check is submitted herewith for the extension of time, and no other fee is believed due for this response. The

Commissioner is hereby authorized to charge any additional fee due or credit any overpayment to **Deposit Account No. 13-0010 (IO-1027-US)**.

Respectfully submitted,


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